

DESAL '92 Arabian Gulf Regional Water Desalination Symposium**CONTENTS****VOLUME 93****Evaporation**

- 1 Progress in distillation
 R. Rautenbach
- 15 Developments in saline water distillation technology
 B. Tleimat and M. Tleimat
- 43 The MSF desalination process and its prospects for the future
 M.H.A. El-Saie
- 57 The development of the multi-stage flash distillation process:
 A designer's viewpoint
 R.M. Morris
- 69 Design and operating comparison of MSF and MED systems
 O.J. Morin
- 111 Recent achievements of low temperature multiple effect desalination
 in the western areas of Abu Dhabi, UAE
 T. Michels
- 119 Review of various combinations of a multiple effect desalination plant
 (MED) and a thermal vapour compression unit
 A. Al-Radif
- 127 Some thoughts on the limitations on increasing the unit sizes of
 conventional cross-tube MSF distillation plants
 W.T. Hanbury
- 147 Feasibility of installing back pressure turbine at Umm Al Nar East station
 A.M. Al-Baghdadi

- 159 Improvement in distiller production and performance ratio after modification of the stage venting system
I.D. McGregor and H. Moore
- 171 On-load tube cleaning systems and debris filters for avoidance of micro- and macrofouling in MSF desalination plants
H. Böhmer
- 181 Large pumps in power and desalination plants
H. Osman, A.H. Sultan, A. Radif and S.A. Aziz
- 207 The effects and limitations issued by non-condensable gases in sea water distillers
K. Genthner, A. Gregorzewski and A. Seifert

Reverse Osmosis, Ultrafiltration

- 235 Preliminary experiment on seawater pretreatment with UF membranes for RO desalination
T. Okabe, M. Hirai, K. Ohta, T. Ishii and T. Goto
- 245 Modeling and calculation of temperature-concentration polarisation in the membrane distillation process (MD)
S.P. Agashichev and A.V. Sivakov
- 259 Practical observations on reverse osmosis plants including raw water contamination problems, different intake stations and permeator performance
F.S. Al Ketbi, E.Z. Isnasious and A.M. Al Mahyas
- 273 Preparation of asymmetric membranes for desalination, clarification of turbid water and biotechnological down-stream processing
C.L. Radiman, H. Sangkanparan, V.S. Praptowidodo and O.B. Liang
- 287 Scale formation and fouling problems effect on the performance of MSF and RO desalination plants in Saudi Arabia
M. Al-Ahmad and F.A. Aleem

Cogeneration

- 311 Selection of optimally matched cogeneration plants
B.A. Kamaluddin, S. Khan and B. Makkawi-Ahmed
- 323 Optimal performance of MSF distillers for UANW 9 and 10 power plant. A thermoeconomic study
A.M. El-Nashar and A.A. Qamhiyeh

Water Management, Economics and Pollution Control

- 343 Technical and economic evaluation of distillation and reverse osmosis desalination processes
N.M. Wade
- 365 An approach to improving the effectiveness of a large-scale complex utility organization
B. Makkawi-Ahmed and A. Damodaram
- 373 Total quality management and desalination plants:
A practical application for result-based management methods
H. Griepentrog
- 387 Factors affecting the useful economic life of large MSF distillers
I.D. McGregor and A. Barton
- 397 Towards less expensive fresh water from the sea
M.G. Morsy
- 409 Fuel economics: A comparative study of dual-purpose power and desalination plants in the WED grid based on a constant heat value of water
M.N. Saeed
- 431 Chemical tests for proper unit operation of water purification plant by membrane and ion exchange techniques
M.R. Miah
- 443 The influence of pollution on desalination
S. Khorfan

Materials and Corrosion

- 445 Current status of materials selection for MSF distillation plants
T. Hodgkiess
- 461 Inhibition of the corrosion of steel pipes carrying potable water
II. Optimization of Ca^{2+} and HCO_3^- content in the presence of phosphate inhibitors
T.M.H. Saber and A.H. Salem

- 473 Electrochemical and spectroscopic studies on dezincification of α -brass
Part II. Effect of polarization on the dezincification process
T.M.H. Saber and A.A. El Warraky
- 487 Effect of residual and minor constituents on the corrosion behaviour of some
technically important alloys
A.M. Shams El Din
- 499 Copper alloys for desalination plants
A.M. Shams El Din
- 517 Performance of materials used for the venting system in WED's
desalination plants (MSF)
E.A. Al Sum, A. Al-Radif and S. Aziz
- 529 New and developed material and chemicals in desalination technology
M. Morsi Abou El Ela
- 537 Electrochemical behavior of a high strength nickel-based alloy in H_2SO_4
K. Habib
- 545 The electrochemical way of removing the hardness of water
A. Bannoud

Renewable Energy

- 557 Enhanced evaporation of saline water in multi-purpose solar
desalination units
H.K. Abdel-Aal and M.A. Al-Naafa
- 563 Overview of solar desalination
O.A. Hamed, E.I. Eisa and W.E. Abdalla
- 581 Solar desalination in Sudan
S.S. Ali
- 587 Dehumidification of atmospheric air as a potential source of
fresh water in the UAE
A. Khalil
- 597 An optimal design of a solar desalination plant
A.M. El-Nashar

- 615 Operational problems in the solar desalination plant and its remedies
M. Abdus Samad
- 625 Factors influencing the performance of basin-type solar desalination units
A.-M. A. El-Bassouni
- 633 Egyptian experience in utilizing recycled water for irrigation purposes
S. Mukhamer and J. Ibrahim
- 635 Author Index